CODEX STANDARD FOR CANNED PEARS

CODEX STAN 61-1981

1 SCOPE

This Standard applies to canned pears, as defined in Section 2 below, and offered for direct consumption, including for catering purposes or for repacking if required. It does not apply to the product when indicated as being intended for further processing.

2 DESCRIPTION

2.1 PRODUCT DEFINITION

Canned pears is the product:

(a) prepared from pears of proper maturity of commercial canning varieties conforming to the characteristics of the fruit of *Pyrus communis* or *Pyrus sinensis*, which pears are peeled, cored, and stemmed, except that whole may not need to be peeled, cored, or stemmed and half pears may not need to be peeled;

(b) packed with water or other suitable liquid packing medium and may be packed with seasonings or other flavouring ingredients; and

(c) processed by heat, in an appropriate manner, before or after being hermetically sealed in a container, so as to prevent spoilage.

2.2 STYLES

2.2.1 **Whole -** peeled or unpeeled, with cores removed or left in.

2.2.2 **Halves -** peeled or unpeeled, with stems and cores removed, and cut into two approximately equal parts.

2.2.3 **Quarters -** peeled and cut into four approximately equal parts.

2.2.4 **Sliced -** peeled and cut into wedge-shaped sectors.

2.2.5 **Diced -** peeled and cut into cube-like parts.

2.2.6 **Pieces or Irregular Pieces -** peeled and comprising irregular shapes and sizes.

2.2.7 **Other Styles**

Any other presentation of the product should be permitted provided that the product:

(a) is sufficiently distinctive from other forms of presentation laid down in the Standard;

(b) meets all relevant requirements of the Standard, including requirements relating to limitations on defects, drained weight, and any other requirements which are applicable to that style which most closely resembles the style or styles intended to be provided for under this provision; and

(c) is adequately described on the label to avoid confusing or misleading the consumer.

3 ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 COMPOSITION

3.1.1 **Basic Ingredients**

Pears as defined in Section 2.1(a) and liquid packing medium appropriate to the product.

3.1.2 **Packing Media**

In accordance with the Codex Guidelines for Packing Media for Canned Fruits (CAC/GL 51-2003).

3.1.3 **Other Permitted Ingredients**

(a) lemon juice (single strength or concentrated) added as an acidulant or flavour enhancer; and

(b) spices, spice oils, mint.

3.2 **QUALITY CRITERIA**

3.2.1 **Colour, Flavour and Texture**

Canned pears shall have normal colour, flavour and odour (except for coloured pears permitted in Section 4.2) and shall possess a texture characteristic of the product. A slight pink discoloration should not be regarded as a defective.

3.2.2 **Uniformity of Size**

Whole, Halves, Quarters - in 95% by count of units that are most uniform in size, the weight of the largest unit should be no more than twice the weight of the smallest unit, but if there are less than 20 units, one unit may be disregarded. Where a unit has broken in the container, the broken pieces are reassembled to approximate a single unit of the appropriate style.

3.2.3 **Definition of Defects**

(a) **Blemished and trimmed pear units -** blemished units with surface discoloration and spots that definitely contrast with the overall colour and which may penetrate into the flesh, such as bruises, scab, and dark discoloration. Trimmed units that have deep gouges, whether due to physical trimming or other means, and which definitely detract from the appearance; trimmed units are considered defects only in whole, halved, and quartered styles.

(b) **Broken -** a unit severed in two or more parts should be considered as one unit when reassembled to the approximate size and shape of an average unit in the container.

(c) **Core material** - consisting of the seed cell, whether loose or attached, with or without seeds. For the purposes of calculating the defects allowance, all pieces of a core in the sample should be aggregated and pieces totalling approximately one-half of a core should be counted as one unit.

(d) **Harmless plant material -** stems or stalks and leaf (or similar vegetable material).

(e) **Peel** - peel that adheres to pear flesh or is found loose in the container.

(f) **Seeds** - any one pear seed or the equivalent in pieces of one seed that are not included in core material.

3.2.4 **Defects and Allowances**

The product should be substantially free from defects such as harmless plant material, peel (in peeled styles), core material, blemished units, and broken units. Certain common defects should not be present in amounts greater than the following limitations:

Defects		Maximum limits
(a) **Blemished and trimmed pear units**		(i) Total, 30% by count; or 3 units per container when count is less than 10; provided the sample average is no more than 30%; - but limited to - (ii) 20% by count blemished; or 2 units per container when count is less than 10; provided the sample average is no more than 20% for blemished.
(b) **Broken -** in Whole, Halves, and Quartered styles only.		20% by count; or 2 units per container when count is less than 10; provided the sample average is no more than 10%.
(c) **Core material** (average) - except in "Whole-Not Cored" styles.		3 units per kg of total contents.
(d) **Harmless plant material**	(i) Stems or stalks	1 piece per 3 kg of total contents (in styles in which the stem is customarily removed).
	(ii) Leaf (or similar vegetable material)	2 cm^2 per kg of total contents.
(e) **Peel** (Average) - except in "Unpeeled" styles.		10 cm^2 (10 sq. cm.) aggregate area per kg of total contents.
(f) **Seeds** (average) - except in "Whole-Not-Cored" styles.		8 per kg of total contents.

3.3 CLASSIFICATION OF "DEFECTIVES"

A container that fails to meet one or more of the applicable quality requirements, as set out in Section 3.2 (except those based on sample averages), should be considered as a "defective".

3.4 LOT ACCEPTANCE

A lot should be considered as meeting the applicable quality requirements referred to in Section 3.2 when:

(a) for those requirements which are not based on averages, the number of "defectives", as defined in Section 3.2, does not exceed the acceptance number (c) of an appropriate sampling plan with an AQL of 6.5; and

(b) the requirements of Section 3.2, which are based on sample averages, are complied with.

4 FOOD ADDITIVES

4.1 ACIDIFYING AGENTS

INS No.	Name of the Food Additive	Maximum Level
270	Lactic Acid	Limited by GMP
296	Malic Acid	
330	Citric Acid	
334	L-Tartaric Acid	1300 mg/kg

4.2 **COLOURS** (permitted only in special holiday packs)

INS No.	Name of the Food Additive	Maximum Level
102	Tartrazine	200 mg/kg of the final product singly or in combination
123	Amaranth	
124	Ponceau 4R	
129	Allura Red AC	
143	Fast Green FCF	

4.3 **FLAVOURINGS**

Natural and artificial flavours, except those which reproduce the flavour of pears	Limited by GMP

5 CONTAMINANTS

5.1 HEAVY METALS

The product covered by the provisions of this Standard shall comply with those maximum levels for heavy metals established by the Codex Alimentarius Commission for this product.

5.2 PESTICIDE RESIDUES

The product covered by the provisions of this Standard shall comply with those maximum pesticide residue limits established by the Codex Alimentarius Commission for this product.

6 HYGIENE

6.1 It is recommended that the product covered by the provisions of this Standard be prepared and handled in accordance with the appropriate sections of the Recommended International Code of Practice – General Principles of Food Hygiene (CAC/RCP 1-1969) and other relevant Codex texts such as codes of hygienic practice and codes of practice.

6.2 The product should comply with any microbiological criteria established in accordance with the Principles for the Establishment and Application of Microbiological Criteria for Foods (CAC/GL 21-1997).

7 WEIGHTS AND MEASURES

7.1 FILL OF CONTAINER

7.1.1 Minimum Fill

The container should be well filled with fruit and the product (including packing medium) should occupy not less than 90% of the water capacity of the container. The water capacity of the container is the volume of distilled water at 20°C which the sealed container will hold when completely filled.

7.1.2 Classification of "Defectives"

A container that fails to meet the requirement for minimum fill (90% container capacity) of Section 7.1.1 should be considered as a "defective".

7.1.3 Lot Acceptance

A lot should be considered as meeting the requirement of Section 7.1.1 when the number of "defectives", as defined in Section 7.1.2, does not exceed the acceptance number (c) of an appropriate sampling plan with an AQL of 6.5.

7.1.4 **Minimum Drained Weight**

7.1.4.1 The drained weight of the product should be not less than the following percentages, calculated on the basis of the weight of distilled water at 20°C which the sealed container will hold when completely filled[1].

(a)	Whole Style	50%
(b)	Halves, Quarters, Slices, Pieces	53%
(c)	Diced	56%

7.1.4.2 The requirements for minimum drained weight should be deemed to be complied with when the average drained weight of all containers examined is not less than the minimum required, provided that there is no unreasonable shortage in individual containers.

8 LABELLING

The product covered by the provisions of this Standard shall be labelled in accordance with the Codex General Standard for the Labelling of Prepackaged Foods (CODEX STAN 1-1985). In addition, the following specific provisions apply:

8.1 NAME OF THE PRODUCT

8.1.1 The name of the product shall be “Pears”.

8.1.2 When pears are artificially coloured, the declaration should be made as part of the name or in close proximity to the name, including the characterizing colour, e.g. “Pears - Artificially coloured Green”. When pears are presented unpeeled, this should be mentioned in the label.

8.1.3 As part of the name or in close proximity to the name, any flavouring which characterizes the product should be declared, e.g. "with X", where appropriate.

8.1.4 The style, as appropriate, shall be declared as a part of the name or in close proximity to the name:

(a) “Whole” (when peeled and not cored); and additionally “Stemmed” or “Unstemmed”, as the case may be.

(b) “Whole Unpeeled” (when not peeled and not cored); and additionally “Stemmed” or “Unstemmed”, as the case may be.

(c) “Whole - Cored” (when peeled and cored).

(d) “Whole Unpeeled - Cored” (when not peeled but cored).

(e) “Halves” (when peeled).

(f) “Halves Unpeeled” (when not peeled).

(g) “Quarters” or “Quartered”.

(h) “Slices” or “Sliced”.

(i) “Dice” or “Diced” or “Cubes”.

(j) “Pieces” or “Irregular Pieces”.

8.1.5 **Other Styles** - If the product is produced in accordance with the other styles provision (Section 2.2.7), the label should contain in close proximity to the name of the product such additional words or phrases that will avoid misleading or confusing the consumer.

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[1] For non-metallic rigid containers such as glass jars, the basis for the determination should be calculated on the weight of distilled water at 20°C which the sealed container will hold when completely filled less 20 ml.

8.1.6 The name of the product may include the varietal type.

8.2 LABELLING OF NON-RETAIL CONTAINERS

Information for non-retail containers shall be given either on the container or in accompanying documents, except that the name of the product, lot identification, and the name and address of the manufacturer, packer, distributor or importer, as well as storage instructions, shall appear on the container. However, lot identification, and the name and address of the manufacturer, packer, distributor or importer may be replaced by an identification mark, provided that such a mark is clearly identifiable with the accompanying documents.

9 METHODS OF ANALYSIS AND SAMPLING

See relevant Codex texts on methods of analysis and sampling.